

Abstract

In the method for regulating the operating frequency of a fiber-optic gyroscope (FOG 100) with a closed control loop, in which the demodulated output signal of the FOG detector (10), as actual signal, is applied on the one hand to the input of an FOG main controller (14) and on the other hand, via a gating filter (20), to a VCO (12) that determines the system clock of the FOG, the invention provides for feeding an additional modulation signal, as analog signal (ϕE), to separate phase correction electrodes that are formed together with the electrodes of a digital phase modulator in an integrated optical chip (MIOC 11). The method according to the invention and the particular configuration of the MIOC (11) enable the operating frequency of the FOG to be regulated exactly.

(Figure 1)